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ABSTRACT

Ten articles concern aspects of education for the gifted at the preschool and primary levels. Articles have the following titles and authors: "Screening Program for Gifted/Talented Students: Grades 1 and 2--A Blueprint for Success" (Sheila Smith); "Fulfilling the Dream of the Great Society" (Evie Hiatt); "The Enabling Curriculum: Appropriate Activities for Primary-aged Gifted Students" (Susan Baum); "Nurture, Challenge, Caring--A Plea for Young Gifted Children" (Donnelly Gregory); "Literature for the Young Gifted Student" (Joyce VanTassel-Baska); "Helping Young Achievers Learn To Manage Their Time" (Anne Wolf); "Preschool Gifted Children: How To Identify and Meet Their Learning Needs In and Outside the Home" (Paul Plowman); "Big Potential Comes in Small Packages--Identifying and Nurturing Gifted Toddlers" (Merle Karnes); "Educational Discrepancies" (Sandra Kaplan); "Intellectual Development during Early Childhood (Two through Four Years)" (Barbara Clark). (DB)

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CALIFORNIA ASSOCIATION FOR THE GIFTED

Preschool/Primary Education for the Gifted

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Screening Program For Gifted/Talented Students: Grades 1 and 2 — A Blueprint For Success

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My daughter is entering first grade, how soon can I get her identified?

He isn't like his brothers and sisters . . . She couldn't be gifted; she doesn't read.

What are the characteristics of primary-aged gifted/talented youngsters?

What are the behaviors and abilities that I should look for in recommending students for identification in the program?

I have never considered giftedness as a possibility for these children, especially those who misbehave. We don't understand this behavior in one so young.

These questions and statements made by parents and teachers are all too familiar. Consider them carefully. Each conveys varying degrees of knowledge about giftedness. Some suggest that the parent or teacher is actively looking or screening for characteristics of giftedness. While other statements suggest both lack of familiarity and indeed, some preconceived notion that giftedness may not be a possibility for a given population. These remarks are typical responses and reveal the need for continuous parent, teacher, and administrator education about the characteristics of gifted/talented children and about differentiated programs to serve their needs.

The task of educating has been made easier with the development of a specially designed Screening Program for Grades 1 and 2 students in Los Angeles Unified School District. The screening program provides an excellent opportunity for elementary schools to develop programs of substance for young people without labeling them prematurely. Schools have the advantage of spending one to two years in observing and nurturing the abilities of students during the screening process. This translates into much more data for recommendation and identification and subsequent programming based in specific individual needs.

The overall objectives of the program are:

- To recognize, assess, and nurture the intellectual, physical, social, and emotional needs of potentially gifted/talented children
- To observe and strengthen each child's potential for creative problem solving
- To develop basic skills at a rate appropriate to the participant's capabilities
- To involve parents by helping them in recognizing potentially gifted/talented characteristics, in recording behaviors, and in fostering gifted/talented growth

The program is conducted in two phases at the local school site: (1) search (2) screening. After initiating a search, schools form, within the **regular classroom,** a cluster of students who seem to have gifted/talented potential.

This procedure supports the notion that there should be continuous search for potential students and that classrooms should provide children with activities which are designed to give them the opportunity to develop complex and higher-level thinking processes. The activities give attention to both cognitive and affective learning experiences.

Throughout the year, students may be added to or removed from a cluster, depending on their individual needs. The flexibility of participation must be explained to parents, and their agreement on a student's being added to or removed from a cluster must be obtained. Parents' involvement in planning and evaluating the program is essential.

The program encourages teachers to make the screening process a joint venture between home and school. Parents can supply crucial information about characteristics of their children that may not be readily evident in a classroom setting. So that parents may be involved at the outset of the screening program, a parent inventory is provided to gather information. The form, which is available in Korean, Chinese and Spanish, helps parents to become aware of some of the characteristics to look for and enables them to assess the degree to which the child exhibits each characteristic that is listed. Records show that parents can make accurate referrals and that training improves that accuracy for parents and teachers. Parents are also involved in extending the program into the home and evaluating the program.

Since this procedure allows for much more involvement in screening, the local school can be more knowledgeable about the program needs of children recommended for identification.

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Fulfilling the Dream of The Great Society

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The Texas Education Agency sits in the shadow of the Lyndon Baines Johnson School of Public Affairs. It is no accident, then, that one of the primary concerns of the Agency is to assure that the educational needs that President Johnson sought to remedy during his administration are addressed. One of those concerns was to make certain that each child, regardless of economic status, color, or background, receive the educational opportunity to reach his/her potential. Certainly, this was one of the motivating factors for the establishment of the Institutes for Teachers of the Young Disadvantaged Gifted.

The project, funded by Chapter 2 discretionary monies, contains some of the components that were characteristic of programs established during the Great Society. The project was first awarded in 1985 and is renewable for two years. It is specifically designed to meet the needs of disadvantaged students—defined for the purpose of this project as those who are potentially gifted and are economically disadvantaged, rurally isolated and/or representatives of ethnic or racial minorities. The project is designed to address the very young child, ranging in age from four to eight years old. It is meant to be not just a laboratory for the students, but a training ground for increasing the understanding by teachers of the needs of their students.

However, the twenty years that separate us from the Great Society have changed our outlook. These grants are small—$65,000 per site—and very carefully monitored. Identification procedures, the curriculum to be used, and the evaluation procedures to be adopted were developed at the central agency level. Checklists are sent to staff sites as a means of on-going evaluation, and participating institutes must agree to accept the parameters of the project before they are awarded any funding. Of particular importance are follow-up activities required at each site so that the project will not exist as an island surrounded by the regular educational flow of events.

This project was critical to the success of programs for gifted students in Texas. By 1991 racial and ethnic minorities will be the majority of the school population. As in other states these minority students are not proportionately represented in programs for gifted students. Educators cite the lack of appropriate objective measures to identify potentially gifted students as one reason for this underrepresentation. Another reason frequently cited is that these special programs tend to start after the third grade, when skill gaps may have occurred that cause minority students to do poorly in school. The Institutes for Teachers of the Young Disadvantaged Gifted are meant to find answers to these rationalizations for not serving our gifted disadvantaged students.

In 1986, institutes were established at four sites in the state—San Antonio at Trinity University, in Huntsville at the Education Service Center VI, in West Texas at Lubbock Independent School District, and in the Trans-Pecos area at Sul Ross University in Alpine. By the guidelines established in the proposal, each site had to include a college or university and assure services to the region, not just to a specific town or school district in which the site was located. Institutes were run for four weeks during June and July and each site involved approximately 25 teachers and 75 young disadvantaged gifted students between the ages of four and nine years of age. Much of what was learned during the first year of the project is being incorporated and used to modify our expectations and projected outcomes for the second project year, 1986-87.

The 1986 site staffs met with the project consultant for training. During the two three-day sessions, the staffs defined their objectives and specified their intended outcomes. The eight **objectives** were:

1. To provide programs for young students who are members of underrepresented populations not traditionally served by gifted programs.
2. To stimulate an awareness of the need for preschool/primary gifted programs at the local school district level.
3. To provide laboratory setting to serve as a practicum for the training of teachers in the effective implementation of differentiated curricula for the gifted and in the use of appropriate instructional strategies to educate the young gifted learner.
4. To determine the usefulness of recognized instruments and techniques as well as to develop and field-test non-traditional procedures to identify young children who are economically disadvantaged, rurally isolated, or representative of ethnic minorities.
5. To develop and field-test differentiated curricula for young gifted learners that can be disseminated to local school districts for use in their preschool/primary programs for the gifted.
6. To provide teachers with the knowledge and skills necessary to become adequate trainers of their peers who teach primary grades at the local school level.
7. To design effective programs to educate parents to understand and support the educational needs of their gifted children.

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8. To confirm the value of the institute concept as a mechanism for teacher training of the young disadvantaged gifted and as an educational provision for young disadvantaged gifted children.

These objectives indicate certain non-negotiables that all institute staff deemed important. First, the project would be developing new methods of identification and new curricula that would be field-tested in a laboratory setting. Second, the project would not be an end in and of itself. Teachers who participate in the institute training would be expected to replicate that training in their home district. Also, school districts with young students participating in the project would be expected to continue appropriate services during the school year. The college or university that participates in each project is expected to offer course work in gifted education as an indication of their commitment to the program. Most important, institutes would develop programs to assist parents in understanding the needs of their gifted children. The implementation of these objectives is being carefully monitored during this second year of the project.

Essentially, each institute in the project has three major components. The first is provided **to,** rather than **by,** institute staffs. As in 1986, six days of training for the staff who will be working with the teachers is provided by the project consultant. The training is divided into two segments of three days each and is designed to acquaint site staff with the teacher and student competencies.

These competencies, which were developed during last year's training, form the basis of the second component of the project – the institutes themselves. Each institute has a theory portion taught by institute staff and a practicum that allows the teacher trainees to work with young disadvantaged children. Understanding of the teacher competencies is essential for the identification of teacher trainees for the project and for the development of curriculum for the theory portion of the institute training. Nineteen competencies are grouped under the following three broad **principles:**

1. The teacher exhibits understanding of the general characteristics of all gifted students and the specific characteristics of each gifted student.
2. The teacher demonstrates knowledge of curriculum development and implementation of instructional strategies appropriate to young students.
3. The teacher functions as an educator and trainer of parents and other educators.

During this training in theory, which is reinforced by the practicum, teachers begin to see the general principles of gifted education applied to the specific child. The training is designed to permit teachers to see the process from beginning to end. They develop a full understanding of how students will be selected for the project, then they implement the curriculum that will develop the students' talents, and they work with parents and other teachers to assure reinforcement of the skills that are being emphasized.

The practicum portion of the institute is built around seven student competencies and the curriculum imperatives that must be addressed to achieve them. **The seven competencies, which specifically center on the preschool and primary aged youngster, are:**

1. The student will develop an understanding and appreciation of unique and advanced topics of study within the disciplines.
2. The student will develop new areas of interest.
3. The student will develop skills in productive thinking.
4. The student will develop the ability to investigate independently information that has been self-selected or teacher directed.
5. The student will be able to communicate information in a variety of product forms.
6. The student will develop an awareness and appreciation of the nature and scope of "giftedness."
7. The student will develop a value for learning-to-learn.

To address these competencies, content, process, project and affective imperatives were also established. Again, these twenty-three imperatives focus on the development of young children. Units based around broad themes have been and are being developed for use in the institutes. If successful, these units will be the core of a sample curriculum that can be disseminated to school districts for their full-year programs for young gifted students.

The third component of the project consists of the follow-up activities that are required of each institute site. These activities include providing assistance to teachers who participated in the summer institute; working with districts that are providing programs for young students who participated in the program; working with the participating college and/or university in developing courses on gifted education; providing technical assistance and staff development in serving young disadvantaged gifted students.

Results of last year's institutes are being evaluated currently. Interest in this project and its objectives is so strong that the Texas Chapter 2 Advisory Committee on Discretionary Funds increased funding so that two additional sites could be selected for 1987. Participants for this summer's institutes will be selected in January, 1987.

It is hoped that when the project has completed its three-year cycle, education of disadvantaged gifted students will be improved. New means of finding these students and more appropriate ways to serve them will be available for districts throughout Texas and the country. If we fulfill this goal, we will have taken a step toward fulfilling the dream of the Great Society.

The Enabling Curriculum:
Appropriate Activities for Primary-aged Gifted Students

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"It's all Plato's fault!" declared an angry third grade philosopher. Confronting him and his second and third grade classmates was the invasion of the Utopian community, that they had created in their gifted enrichment program, by a neighboring totalitarian state. "I wish Plato never lived," he continued. "You know, if there were no Plato, there would be no philosophy. If there were no philosophy, there could be no conflicting philosophies, and then we wouldn't be in this mess!"

"Could be," replied his concerned colleague. "You know, dictators are like the Queen of Hearts in *Alice in Wonderland*—always chopping off heads whenever they choose. And you know how Alice got rid of the Queen."

These young philosophers were seeking a solution to their peace-loving community of "Warm Fuzzies" from the invasion of "Cold Pricklies". This was a simulated experience contrived by their teacher in the pull-out enrichment program.

"I have an idea," piped in another concerned classmate. "Remember the story of the Trojan Horse? Well, we still have our model of the horse. How about filling it with reinforcements of Warm Fuzzies and leaving it outside the city walls"?

Anyone who is involved with bright preschool and primary-aged youngsters is acutely aware of their need for a sophisticated, challenging environment suitable to their development level, and activities that encourage the use of early abilities in logical and metaphorical thinking as illustrated in the discussion above by our young philosophers. However, existing classroom policies and practices offer little support for change. The "back to the basics" movement with its renewed emphasis on drill of basic skills, and direct instruction in favor of discovery learning, ignores the special needs of gifted youngsters. Also, prevailing attitudes outlawing any form of acceleration or deviation from pace and content of the regular curriculum denies these youngsters the right to learn at a rate commensurate with their ability—a right guaranteed to other exceptional children by Public Law 94-142 (The Education of All Handicapped Children Act, 1975). In addition, the content covered and vocabulary used in adopted texts may insult the intellectual levels of these youngsters and possibly retard their intellectual growth.

In mathematics, for example, the emphasis on readiness, drill and basic facts that is spread over 3 or 4 years represents a giant step backwards from the skills many gifted youngsters demonstrate before entering school. Similarly, topics introduced in social studies and science like community helpers and seasons are often too primitive and concrete for children who have discovered these ideas at three and four years of age.

Bright youngsters, in fact, are often first identified by their advanced vocabulary and rich language; some even demonstrate an early ability to read. They learn easily and spontaneously without requiring considerable drill and repetition. Because these bright young minds prefer complex ideas, they often pursue advanced topics and sophisticated interests with dedicated vigor and enthusiasm. As a result, many of these children possess extraordinary knowledge in specific areas. Others arrive at school at four or five years of age already demonstrating a facility with math concepts, map reading, and logical thinking.

The Back to Basics movement has resulted in the curriculum's retreating to a position in which bright children are merely marking time instead of using their advanced abilities to create new knowledge or new art. It is imperative that teachers learn and apply strategies within the framework of the established curriculum not only to counteract this retarding effect on bright children but genuinely to expand their intellectual horizons.

The Enabling Curriculum

The remainder of this article will present an approach to curriculum which respects the ability levels and learning characteristics of bright youngsters and provides challenges to stimulate their intellectual growth.

This approach is based on the educational philosophy of Bruner (1960) who boldly asserts that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development" (p. 33). Underlying this assertion are (1) Bruner's notions about intellectual development and (2) his theory of instruction.

Bruner's Ideas: A philosophical position.

Intellectual development can be explained by the sequential ways in which we come to interpret our world or acquire knowledge. Bruner claims that intellectual development progresses through three phases or modes of representation: enactive, iconic, symbolic. At different stages of development one mode is generally preferred over the others. During the first three years of life

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Sophisticated Content . . . Scientific Method

youngsters chiefly learn to represent their world enactively or through action. You might say that in order to understand a phenomenon a young child needs to get the "feel" of the event. Much early learning is accomplished by doing or acting upon stimuli. As the child matures through preschool and the primary grades, he relies less on action and more on how a phenomenon looks. He can use imagery to represent his world or the iconic mode. Now learning involves picturing a concept. During these years, Bruner feels teachers should represent ideas visually to improve understanding. Thus to enhance the learning of complex topics for the young gifted child, enactive and iconic experiences are preferred.

Theory of Instruction

An examination of Bruner's spiral curriculum approach to instruction in conjunction with his theory of development illustrates how experiences can be designated to optimize learning.

Bruner believed that we should not postpone the teaching of abstract subjects because they appear to be too difficult. Children can often understand basic concepts of complex ideas if they are simplified and translated into the appropriate mode of representation. He further explains that a better understanding of complex issues will result when early learning provides a basis for later learning.

Bruner also argues that the underlying principles of disciplines or fields of study should be the focus of content objectives. In this way, intellectually curious students have opportunities to explore underlying ideas from fields of knowledge and apply them to topics and issues of their personal interest. The mastery of these objectives, furthermore, should be accomplished through inquiry or problem solving approaches. Instruction in mathematics, for instance, must consider rules or underlying themes not merely the introduction of isolated topics and assorted facts to memorize. As an example, two units typically found in a first grade math curriculum are money and fractions. The youngsters are asked to recognize simple fractions and identify coins. Experience shows that it is unlikely, however, that first grade teachers will ever ask their brightest students to discover that coins are also fractions—a broader theme or principle.

Consider the discourse of the young philosophers we encountered at the beginning of this article. They were starting to understand basic principles of philosophy—the nature of belief systems and the results of conflicting belief systems. These ideas are recurrent throughout history in all aspects of life, from interpersonal human dynamics to worldwide politics. Note that these children were able to discuss solutions to a complex abstract problem made real to them through their involvement in the teacher-created simulation (an enactive and iconic experience).

A problem solving or inquiry approach to learning is particularly well-suited to gifted children. By its nature, inquiry forces children to use the higher level processes of analysis, synthesis and evaluation (Bloom, 1956). Inquiry also requires intuitive thinking and risk taking behaviors on the part of the learner. According to Bruner (1960) analytic thought balanced with intuitive-thinking provides the basis for both creative ideas and the production of new knowledge, goals basic to gifted education (Renzulli, 1977).

Inquiry, or discovery learning, has encountered disfavor among the majority of educators in recent years. There appears to be several reasons for this attitude: First, most children do not have the intellectual ability to make intuitive leaps from specific examples to a general rule or idea. Secondly, discovery learning or inquiry approaches are time-consuming and can invite frustration; many trials may be needed before the appropriate solution is discovered. With gifted students, however, time is often in abundance. These are the youngsters who can accelerate through the regular curriculum, easily mastering basic skills taught through direct instruction. By using sophisticated content and inquiry-based processes we can challenge our gifted 4-8 year olds and further stimulate their intellectual growth.

Inquiry involves using the scientific method. Simply stated, primary students should be taught to perceive problems, offer hypotheses, and test their hypotheses by gathering data (primary as well as secondary). Even nursery school-aged children can conduct surveys and interviews, perform experiments and observe change, write or phone for information, and consult sophisticated sources like atlases, picture books, and discipline-based magazines.

Children engaged in the advanced-level activity described here should use the tools of an active inquirer. Cameras, tape recorders and computers will assist these young researchers to record their data. Simple statistics and graphs allow the gifted youngster to organize their data and draw conclusions from them.

Learning concepts through active inquiry is consistent with Bruner's modes. These actions and visual experiences will not only allow the student to grasp basic ideas but also encourage them to generalize these ideas to new areas.

Creating the Enabling Curriculum

There are endless opportunities to create an enabling curriculum in the classroom. By considering such simple adjustments as suggested below the teacher can transform or extend the regular curriculum into more appropriate activities:

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Inquiry-Based Processes

1. Relate content to a theme or major principle of a discipline rather than isolated facts from some unrelated topics. Teachers must ask questions that allow concrete experiences to grow into bigger issues and more abstract ideas. Experience must start with specific problems arising from the students' experiences and then be extended into greater concerns.
2. The activities should be primarily enactive or iconic. Experiments, building, inventing, simulations or dramatizations are particularly suitable. The use of maps, charts, graphs, demonstrations and observations will further assure the mastery of complex ideas.
3. Transform passive learning processes into active inquiry where the child is a discoveret of new knowledge. Challenge students to solve problems. Extend interests by posing questions to be pondered. Allow for hypothesis testing and risk-taking.
4. Be organic and open-ended in planning enabling experiences. Adhering to pre-determined objectives will inhibit children from transcending the concrete and creating new knowledge. Allow ideas to grow and creative products to evolve. Since basic skills are mastered quickly by gifted learners they have time for divergence and indepth analysis.

The following learning experiences provide specific examples of curriculum ideas that incorporate these adjustments.

Classroom Examples:

Measurement is a typical skill taught in the primary curriculum. Simple modifications can transform this isolated skill into a whole new world of abstract notions of spatial relationships and perceptions of relative size. As you read the following passage rich in images, sophisticated in language and spatial concepts, have the children close their eyes to picture the content. "As big as, or bigger than, most other animals which hatch from an egg, this sauropod, working his way clear of a shell, emerges as the smallest baby relative to its mother's size, and yet a uniquely tiny baby. For in the deep footprint of a parent, this baby male and several siblings could easily curl up together" (Stout, Services, and Preiss 1981).

Ask the children to draw a picture of the image envoked by the passage. Next have them hypothesize whether one human baby could fit into the footprint of its parent. After recording their hunches, ask the children to collect the data that would be needed to test their hypotheses size when they were born and a tracing of Mom's footprint. These specific data will personalize the experience for the children and allow them to draw conclusions and understand cognitively the relative size of the baby dinosaur to that of the parent. Mathematical ratios of the baby's size to parental footprint size using pictures or figural representations could follow. Another possibility is to examine relative birth size of the baby of a species to the size of the full grown adult. The results may be charted on a graph for analysis.

Comprehension is a major objective in reading for children. However, to assure the mastery of new comprehension skills the material presented must be challenging, complex, and interesting to the learner. By discussing abstract ideas made real by illustrations in a well-selected picture book the young reader can ponder exciting issues on sophisticated topics (Baum 1985). The book, *The Painter and the Wild Swans* (Clement and Clement, 1986) offers such challenges. Through masterful illustrations the young reader is enchantedly escorted on an amazing journey of courage and risk-taking as an artist pursues his quest for beauty and gains a new understanding of its nature. After discussing the story, students can define beauty in their own lives. They can decide if beauty is a tangible entity or can it be a feeling. They can survey their teachers about the most beautiful moment in their lives or conduct a case study defining beauty in friendship. The possibilities of photographic essays, comparisons of classical music to rock videos, and

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essays or poems on the meaning of beauty in an ugly world are only a few ideas for creative production.

Figure 1 illustrates how these two learning experiences relate to Bruner's ideas and suggestions for teachers described earlier.

Notice in both learning experiences that the focus on a principle extended singular topics into interdisciplinary applications. Mathematics was used to understand spatial relationships in science; reading comprehension was extended to a study in aesthetics. Such learning enhances cognitive growth by encouraging concept development and the facilitating transfer of learning, both vital to the production of new knowledge.

There are countless ideas for incorporating Bruner's philosophy into the primary curriculum. In this article I have tried to show how his ideas lay the foundation for an enabling curriculum so vitally crucial to the development of bright young minds.

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Enabling Experience I:
Relative Size of Baby to Adult

Content Sophistication	Appropriate Development	Learning Process	Possible Product
Curriculum topic: measurement Discipline: math Principle or concept spatial relationships all things are relative	Personal focus points: size of self related to parent Mode of Representation: Use of iconic mode, imagery, picture, visual comparison	Problem solving hypothesis testing	ratios charts

Enabling Experience II:
Nature of Beauty

Content Sophistication	Developmentally Appropriate	Learning Processes	Possible Process
Curriculum topic: reading comprehension Discipline: Philosophy/ aesthetics Principles: can beauty be captured. Beauty is in the eye of the beholder	Personal focal point: What is beauty in own life (etc.)? Mode of Representation: Use of imagery through picture book	Problem solving surveying others' ideas of beauty Can beauty be reproduced? Questioning how beauty makes you feel	Photographic essay Original poems Art

Figure 1: Enabling Experiences

Nurture, Challenge, Caring— A Plea for Young Gifted Children

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It is a privilege to have a forum like the *Communicator* in which to air one's views on issues related to gifted education. It is especially exciting to have a number of different viewpoints of preschool primary education for gifted students explored in one issue. The perceptions shared in this article stem from the vantage point of a practitioner coordinating a long-term research project involving the discovery and nurturing of potential giftedness among children, in grades K-4. The target students for much of this work have been the "hidden gifted" among underachieving, disadvantaged, minority, limited-English, and culturally diverse students (Johnson, Starnes, Gregory and Blaylock, 1986). This focus on potential giftedness among a diverse group of young children may explain the author's personal biases and may illuminate issues introduced but not fully explored here.

Introduction

Rather than briefly discuss many possible topics related to preschool primary education for the gifted, a few issues will be dealt with more extensively. One issue that continues to dog efforts to provide early education for gifted students, is the identification of such students. Although assessment of the abilities of young children has been going on for many years, there are persistent problems in formal identification of young children. Another issue of continuing debate is the recommended focus of programming for preschool primary gifted education. These are the two issues addressed here.

There is a danger that we will dissipate our professional energies by becoming factionalized over opposing views on formal identification and academic versus child development preschools for young gifted students. Before we let this happen, perhaps we should pause to determine whether the basic expectations for early childhood education that we agree on are universally accepted and in place. Preschool and primary environments that provide nurture, challenge, and caring should be the cornerstones of early childhood education. Further refinements in student selection and program delivery for gifted students can be pursued after we are assured that these principles guide the early school experiences in which these youngsters participate.

For clarity the terms below are defined as follows in this article:

gifted children: those youngsters whose intellectual abilities place them in the top 5-7 percent of the total population

highly gifted children: extremely precocious youngsters whose intellectual abilities place them in the top 1-2 percent of the total population

potentially gifted children: those children who demonstrate flashes of ability or brilliance, but who do not perform consistently at that level

preschool: nursery schooling for children ages 3-5, not including kindergarten

primary: elementary schooling in grades K-3, for children ages 5-8

Identification of Young Gifted Students

The identification of young gifted students truly places us on the horns of a dilemma. Most gifted educators philosophically support the need for early recognition and nurture of giftedness but this need begins at the very ages where formal assessment of giftedness is most tenuous (Curry & Epley, 1980; Gregory, 1985; Karnes & Bertschi, 1978; Rodell, Jackson, & Robinson, 1980). If we confine our search to the identification of those rare, **highly gifted** youngsters however, we can be much more successful. Given a challenging educational environment and interaction with sensitive professionals who provide the opportunity, such youngsters reveal themselves. Their extremely advanced abilities are automatically weighed by these adults in comparison to expected performance by typical youngsters of the same age. Confirmation of their abilities can be provided by an individual intelligence test, but their giftedness is almost always obvious.

Identifying **gifted** young children or **potentially gifted** young children on the other hand can be a difficult and risky undertaking. First of all it is difficult to conduct formal testing of children from ages 3-6.

These youngsters are still developing the visual motor integration and fine motor skills that will eventually make it possible to use paper and pencil assessment activities. Individually administered intelligence tests may be more accurate than most other tests given at these ages but they are time-consuming and expensive for most pre-school programs. The rapid and often uneven development in spurts, starts and stops, of most young children means their test performance at a particular point in time yields only a rough estimate of what the child is about and what he can do.

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Gifted and Potentially Gifted Children

Cognitive and creative processes and their accompanying skills should be more important than academic or even pre-academic achievement in identifying young gifted children (Gregory, 1985; Roedell, Jackson, & Robinson, 1980; Shwedel & Stoneburner, 1983). Operationalizing and observing these processes is difficult however. In part it requires some structured assessment that allows the performance of one child to be compared to many others at the same age. Professionals don't yet agree on which processes should be included, and few process oriented assessments are available for children below school age.

Another barrier to recognizing giftedness and potential among young children is separating out the effects of an enriched background and varied preschool experiences on the part of some of these youngsters. Evidence is mounting that young children have a limitless capacity to master huge chunks of information and skills earlier thought to be developmentally impossible. This capacity for learning, the child's natural curiosity, and the determined aim of some parents to create superstars, has given rise to increasing numbers of children arriving for preschool programs with an extensive background of parental/home schooling behind them. The lack of such school and home enrichment for other children further confounds efforts to distinguish among both advantaged and disadvantaged children those who are or are most likely to be gifted.

Minority and/or disadvantaged children without preschool experiences may almost seem to be in an alien environment when they arrive at Head Start or kindergarten. They may be much less ready to profit from these experiences. Their repertoire of skills and abilities may not be easily incorporated into school activities and it will be difficult for their teachers to recognize their giftedness or their potential. Recognition of their giftedness is inhibited even more as language instruction becomes more formalized and they experience beginning problems learning to read and write (Gregory, 1985).

Attempting to differentiate between early teaching and a child's cognitive abilities also makes comparisons among children of the same age increasingly difficult or worse, inaccurate, for teachers. Look at the confusion that develops when we compare two early readers. The first is a 4-5 year old who has learned to read on his own by putting together various language experiences, coupled with a high degree of curiosity and interest in words, letters, signs, labels, and stories. The other child is an early reader who has been taught by an eager mother since the age of two or three with refrigerator letters, flash cards, and read-a-loud books. The first child is likely to be gifted and we frankly do not know about the second child. He has certainly demonstrated an ability to learn from his mother's teaching but we need much more evidence about this child to reach any conclusions about his intellectual ability.

So the dangers of relying on tests and informal information that favor skills gained through preschool experiences is that advantaged students will be over-identified as gifted and gifted students without such skills will be overlooked. The most frequently identified students may in fact be average or above average youngsters who appear to be advanced based on early skill development. Since they will no doubt profit from any differentiated educational opportunities provided them, some may wonder why such overidentification is a concern. Parents of youngsters identified as gifted at age 5 when their ability to read at the third grade level seemed so impressive, may believe their children have actually lost ground when their performance comes closer and closer to grade level expectations. Are they no longer gifted by grades 2 or 3? Did the program fail to nurture their potential? Do they suffer from some inhibiting learning or emotional disabilities? Or, were these youngsters labeled gifted too early? Were they labeled as gifted only on the basis of achievement and academic skills rather than on cognitive/creative processing? Have other youngsters who settled more gradually into the school environment now passed them in both performance and processing skills? Unfortunately, early identification seems to increase the odds that such scenarios will be played out.

Tests for Preschool/Primary Children

The fact that process assessment is difficult among young children has already been acknowledged. Three tests that have been used successfully with preschool/primary youngsters will be briefly discussed. The Coloured Progessive Matrices by J. C. Raven has been helpful in assessing the reasoning ability of young children of diverse background and seems to be less influenced by early schooling (Frechtling and Gross, 1981). Although internal language may facilitate this reasoning task, children do not have to read or write to participate in this assessment and receptive language requirements are minimal. Recent norms published by The Psychological Corporation (1986) provide comparison groups for young students in the United States from ages 4-6. This assessment can be effectively administered to small groups of children from kindergarten on, and is easy to score. It measures analogical reasoning and appears to be an appropriate test for all students except those with visual perception problems.

Another tool that has been used successfully to assess cognitive development in young children is the Cartoon Conservation Scale by Edward DeAvila (Gregory, 1985). The assessment is an exciting conversion of Piagetian conservation tasks into a paper and pencil format (DeAvila & Havassy, 1975). Each item requires the tester to tell a brief story about two children portrayed in cartoon-style drawings. Four items assess each of eight

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concepts, for a total of 32 items. The concepts include conservation of number, length, distance, substance, volume, horizontality of water, probability, and egocentricity and perspective. One of the most useful aspects of this test is that many of these concepts are not routinely assessed among young children. The richness of information available when you interact one on one with a student using the manipulative materials in the Conservation Kit is somewhat diminished with the group administration and paper and pencil format. However, this assessment is developmentally appropriate and yields instructionally useful information on an entire class of students at one administration. It has been used successfully in one program for 5 years with students in grades K-2 (Johnson et al, 1985). The primary difficulty in using this test with children 5 years and younger, is holding their attention and assisting them in marking their responses. If they are motivated long enough to complete the test, it appears to give a valid measure of the mastery of the concepts.

Assessments from the CIRCUS battery developed by the Educational Testing Service (1976) have also proved to be useful for evaluation of the strengths of younger students. Designed for students from nursery school - grade 3, the battery includes assessments of creative production, visual memory, vocabulary, numerical reasoning and critical thinking among others. There are also practice materials to give students exposure to the format for following directions and marking answers. One large school system has found the tests of critical reasoning and numerical reasoning useful for identifying giftedness in K-1 (Frechtling and Gross, 1981). Although these two assessments were not specifically designed as achievement tests, they do seem to favor students with preschool experiences.

Recommendations

What is the answer to problems in the identification of gifted youngsters if they need to have early nurturing of their intellectual abilities? No formal identification? Unfortunately some early childhood programs for gifted students will continue to require formal identification (Richart, Alvino & McDonnell, 1981). There may be a rationale for using a formal process to validate the selection of very young students into a separate program for **highly gifted** if they will be removed from interaction with other youngsters. The academic orientation of such a program may also dictate a special assessment/ selection process to prevent the pain and frustration of including children for whom this programming is not appropriate. The merits of such a program will not be debated here.

Informal techniques can play an important role in the recognition of both gifted and potentially gifted students (Gregory, 1985; Karnes, Shwedel & Linnemeyer, 1982; Roedell, Jackson & Robinson, 1980). Teachers and parents can both provide valuable information about young children. The tests discussed here as well as others

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used in Merle Karnes project at the University of Illinois—Retrieval and Acceleration of Promising Young Handicapped and Talented (RAPYHT) can contribute improved assessment information to the search for giftedness among preschool/primary students (Shwedel & Stoneburner, 1983).

Concerns over the formal identification of young children can be greatly lessened if programs are designed to nurture potential giftedness rather than serve youngsters labeled as "gifted". A classroom climate that encourages open-ended or ongoing assessment will enable the recognition of students' strengths as they emerge (Gregory, 1958). A case study approach is also strongly recommended. All pertinent data on children should be gathered, considered and added to as available. Recognition of giftedness and potential should be long-term, not confined to an age, a month, or even a year. Failure to validate a child's giftedness is most often due to the opportunities we fail to provide the child rather than to the child's lack of ability.

Preschool and Primary Programming for Gifted Children

Any consideration of programming for young gifted children immediately exposes the opposing viewpoints of those advocating direct instruction or academic preschools (Becker, 1977; Bereiter & Kurland, 1981), versus those supporting child centered or child development programs (Doremus, 1986; Elkind, 1986; Schweinhart & Weikart, 1986). It is clear from the current issue of the Association for Supervision and Curriculum Development (ASCD) journal, *Educational Leadership*, that the debate continues to rage around the merits of these two approaches (November, 1986). This dispute has special relevance to programming for young gifted students and we can learn from the sound and fury. The body of knowledge on child development and learning is constantly growing and shifting. Those professionals who are developing programs for young gifted children must be open to all research in early childhood education. The very best programs should evolve from an integration of effective practices with applications of new research.

It could be easy to succumb to the apparent suitability of an academically oriented nursery school for very bright, verbal youngsters who are clearly ready for the demands of such a program. This choice is similar to moving gifted students through accelerated content, a la the Johns Hopkins math program, because they can cope with the pace of the content. No one familiar with the literature on information processing will doubt the capacity of gifted young children to master academic content, the question is, is that the best program focus for gifted children at that age? Consider this comment by Christine M. L. Roberts (1986):

> "The traditional kindergarten, that poetic and mystical garden planted by Frederick Froebel, has vanished. In its place is a serious academic bootcamp where the recruits learn the three Rs in formal groups according to a rigid daily schedule interrupted once a week by specialists offering arts, crafts, and physical education. The message our little campers get is clear: 'It's a hard cruel world out there, so if you want to get to Harvard, you gotta start now, kid!' Something is very wrong here."

This academic boot camp orientation seems to regard young children as miniature producers. Should so much attention be paid to the output of young children? Are we going to measure the usefulness of such programs by the output of the little individuals? A commitment to the development of potential should extend at least from preschool through the primary grades. It is sad enough when very bright high school students are prevented from participating in challenging learning experiences because they cannot furnish a longitudinal record of outstanding performance and achievement. It is horrifying to think that special programs for preschool and primary gifted students would be restricted to those who have already delivered on their giftedness through achievement and production. At what ages would potential be nurtured, in utero through age 2? Consider this comment:

> ". . . we are witnessing a growing emphasis upon the child as a brain; upon the cultivation of narrowly defined cognitive skills and abilities; and above all, upon the creation, through our preschools and schools, of a race of children whose values and progress are judged primarily by their capacity to do well on tests of intelligence, reading readiness, or school achievement" (Gross and Gross, 1977).

Based on the knowledge currently available, a child development orientation to early childhood education would seem to be most appropriate for preschool/primary gifted. Such an approach automatically creates a nurturing environment where further development and diagnosis of giftedness can be explored. The individualization provided allows children to engage in challenges and activities appropriate to their skills and abilities, therefore it can meet the needs of even the most precocious and advanced students. Child development programs also enable children to learn how to learn, an important building block for their future academic success (Doremus, 1986; Schweinhart & Weikart, 1986). These programs guarantee the environment and the opportunity to develop both creativity and problem-solving skills. Nurturing preschool/primary programs can enhance this development with application to real-life situations with

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which young children can relate to. Academic content is not necessary nor desirable for the development of these skills. What should characterize nurturing learning experiences in a child centered program? The following criteria are suggested. They can be used by teachers and parents to evaluate whether an activity will nurture the intellectual potential of able young children (Gregory, in press):

1. A teacher-child dialogue (parent-child) or small group discussion is included: children must have frequent opportunities to refine their thinking about hands-on experiences through talking about them. Such discussions also stimulate the development of their language skills.
2. The children are themselves actively engaged in the learning activity: learning experiences that cause youngsters to passively receive information and direction from others should be delayed as long as possible.
3. The activity develops process skills – not academic skills: young children should be classifying objects by their attributes, not memorizing facts about them.
4. The activity poses a cognitive challenge: probing questions and tasks should push children to extend the boundaries of their knowledge or experience.
5. Visual representations such as pictures or objects are included: preschool and primary students should manipulate concrete objects and use visual representations as they develop and refine concepts.

When activities are truly nurturing, they will promote the growth of a child's intellect, his abilities to think, reason, and create. This goal places a special responsibility on his learning experiences – to be nurturing, such experiences should push students to think, to reflect, to increase their understanding of a concept. But most of all, such experiences must preserve the child's right to be a child.

In closing, enriched opportunities for developing their potential should be guaranteed for all young children. This approach should especially promote the ongoing development of talent and giftedness among these children. The plea to educators and parents is to provide **a caring environment with nurturing and challenging learning experiences for these youngsters.**

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Literature for the Young Gifted Student

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Verbally talented young children need to have a rich literature program from the beginning of their language arts experience in both home and school settings. Children who are reading by kindergarten need a strong literature program at that stage of their development.The use of a basal reading series typically focuses too much time and attention on mastering the reading process, particularly phonics, rather than allowing gifted students the opportunity for holistic reading of good literature. One way to combat this problem is to build a challenging literature program for the gifted by introducing the best and most stimulating selections at each stage of their development.

Many good recommendations abound in terms of developing such a program. Baskin & Harris's (1980) *Books for the Gifted Child* offers annotated reading lists chosen deliberately for the intellectually gifted child at the primary level. These authors have developed useful criteria for selecting appropriate literature for the gifted child:

1. The language used in books for the gifted should be rich, varied, precise, complex, and exciting, for language is the instrument for the reception and expression of thought.
2. Books should be chosen with an eye to their open-endedness, their capacity to inspire contemplative behavior, such as through techniques of judging time sequences, shifting narrators, and unusual speech patterns of characters.
3. Books for the gifted should be complex enough to allow interpretative and evaluation behaviors to be elicited from readers.
4. Books for the gifted should help them build problem-solving skills and develop methods of productive thinking.
5. Books should provide role models for emulation.
6. Books should be broad-based in form, from picture books to folktale and myths to non-fiction to biography to poetry to fiction.

A program like Junior Great Books offers the best of classical and contemporary literature selections for young students and has been successfully used at kindergarten and first grade levels for the gifted. Its rich selections combined with the discussion model are very effective in engaging the young gifted child in the world of books and ideas.

The literature program for young children should provide the context for discussions of key issues, ideas, and themes contained in literature and be a catalyst for student writing, drawing, and performing. It should become the basis for the critical thinking component of the language arts curriculum by helping young students develop their analytical, interpretive, and evaluation skills. Goals of such a gifted literature program may include:

1. To expose students to appropriately challenging reading material at their stage of readiness.
2. To provide opportunities for small group discussions of literature selections.
3. To develop critical reading behavior in the areas of analysis, interpretation, and evaluation.
4. To develop and refine reading comprehension skills.

Reading aloud continues to be an important tool for young children who are enjoying and learning from literature. Small group discussions centered on the following types of questions might be held at the preschool-primary level.

1. What happens in your book? Can you number the events? (sequencing events)
2. Who is the most important person in the book? Why? Who is your favorite person in the book? Why? (character development)
3. What new things did you learn from reading this book that you didn't know before? (concept formation)
4. What were your favorite words or sentences in the book? Why? (language awareness)
5. Good books make us feel as well as understand a story. What feelings did you have as you read this book? (identification)
6. How good was this book compared to others you have read? (evaluation) How would you rate it in respect to:
   - interesting story
   - characters I liked
   - good ideas
   - where it occurred was interesting
   - new things to think about

Early readers then should be encouraged to read on their own and to "think" about their book as a result of the way small group discussion is conducted. Further, individualizing a reading program for the gifted so that books and activities correspond to certain verbal characteristics of students is another way to approach planning a differentiated verbal curriculum for these students. The use of excellent children's literature in all its diversity is an important consideration for providing a foundation for a young child's literature experience. Basal texts and even a single anthology do not offer the rich literary selections needed by the young gifted student. Much of the best children's literature never is incorporated into a single source. Thus, creating a multiple materials approach is crucial to implementing a rich and varied literature program.

Use of discussion-oriented inquiry techniques is also a very critical part of a successful verbal arts program for the gifted. The following example of multiple types of questions and inquiry behavior is based on the children's rhyme, "Twinkle, Twinkle, Little Star":

Type of Behavior	Questions
cognitive	1. What is a star?
evaluation	2. Why do you think the author described it as "like a diamond?"
divergent	3. What if you were a star in the sky? How would you describe what you saw on earth?
evaluation	4. Why do we like to look at stars?
fluency	5. Can you name other things we see in the sky? (Let's make a long list)
analysis	6. How is it that we can see stars?

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Helping Young Achievers Learn To Manage Their Time

By Anne Wolf, Chairman State Parent Council
California Association for the Gifted

Teaching time management is one of the most important contributions an adult can make toward a child's stress-reduced life. Even before children enter elementary school, their days begin to overflow with preschool or daycare, dance lessons and team sports. With the advent of first grade, a new dimension . . . homework . . . must be added to the schedule.

In addition to daily homework, my son's fourth grade teacher gave long term assignments. He could select from a potpourri of suggested activities and was responsible for presenting his work at the end of the month.

He selected the projects and reports that appealed to him. Together, we used his daily planner to plot when each would be completed. The long term assignment became very manageable and enjoyable homework rather than the overwhelming task it could have been to a child who had not been taught to plan.

To nurture time management skills, establish a day-to-day plan for the month with your child (use pencil, things change). Be sure to include morning wake-up, school hours, bedtime, mealtimes, household chores, family events, sports practice and games, church activities, youth group meetings, library book due dates and any other events that fill your child's day. **Planned homework hours are essential.**

Respect your children's schedules. Let them know as far in advance as possible when there will be a change in plans affecting them. Help children choose between activities when their time is overcommitted. Protect their "free time."

As adults, we use daily planners. Mapping our days allows us the freedom to concentrate on the task at hand or relax and enjoy our leisure. I believe the same respect for time management is essential in allowing our children the freedom to be productive and creative in a low stress environment.

No one ever became poor by giving.

Anne Frank

Preschool Gifted Children

How to Identify and Meet Their Learning Needs In and Outside the Home

By Paul D. Plowman, Consultant
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This paper provides answers to four questions raised by parents of preschool gifted and talented children. Increased understanding will result through more thorough assessment of their abilities and interests; discussions with other parents, professional educators, and psychologists; and additional reading.

Question #1: How do I know if my child is gifted or talented?

First of all, you would need to know the definition or characteristics of such children. The legal definition of a gifted and talented child in California is:

Section 52201, *Education Code*

" 'Gifted and talented pupil,' as used in this chapter, means a pupil enrolled in a public elementary or secondary school of this state who is identified as possessing demonstrated or potential abilities that give evidence of high performance capability."

California has six GATE identification categories — each of which requires different assessment, testing, or observational procedures and criteria. The six categories are:

1. Intellectual ability
2. Specific academic ability
3. High achievement ability
4. Creative ability
5. Visual and performing ability
6. Leadership ability

I find it helpful to put the word "extraordinary" before each of these categories. Ask the question: "What children evidence 'extraordinary' demonstrated or potential ability?" The latter (potential ability) is often difficult to determine, especially for "leadership" and "visual and performing arts" abilities.

Helpful in identification might be a kindergarten or first grade teacher, a psychologist, a checklist of identification criteria, and your own comparison of your child with age mates.

Care should be taken, because often home environment factors — e.g., interesting books, music, persons — may cause a child to look advanced over "not as fortunate" peers. Three years later, it may be difficult to say that the identified gifted child is still functioning at extraordinary levels of achievement.

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State Funds

Current law encourages school districts to develop innovative means for identifying gifted and talented children with extraordinary potential or demonstrated ability in one or more of the six categories.

Gifted and talented children are identified by:

1. Reading two or more years in advance of his or her age
2. Unusual facility with mathematics
3. Seeing relationships, discrepancies, and humor not comprehended by other children
4. Concern about adult problems (e.g., world problems)
5. Preference for being with older children
6. Boredom and frustration with low-level or routine assignments in school
7. Unusually resourceful in avoiding unpleasant situations or tasks
8. Spontaneous elevation of thought to abstract concepts
9. Scores on tests of ability or achievement
10. Precocity in playing a musical instrument

Preschool giftedness is assumed when a very young child:

1. Reads words, signs, or other material
2. Asks very profound, advanced, or penetrating questions
3. Demonstrates interests of much more mature children
4. Comes up with several or very unusual ways of creating a new object or of solving a problem
5. Displays unusual humor—resulting from unique associations

Question #2: What are the learning needs of such children and how might they be met?

Needs of preschool gifted and talented can be and are often met by parents in the home or nearby environment. Needs of preschool gifted children include:

1. Many enriched opportunities to explore, to know, to discriminate, to compare, to categorize, to judge, and to express ideas and feelings;
2. Environments (in and outside the home) which encourage exploration;
3. Freedom and encouragement to develop facility in subject matter content and skills and in other areas of special interest;
4. Parents who read to and talk with them.

Parents have helped gifted children touch, hear, see, manipulate, and experience many objects. Children thrive in exploratory settings which have encouraged the refinement of senses, critical thinking, creativity, and problem solving. By taking your child to the zoo, to museums, to aquaria, to plays, to concerts, to gatherings of relatives and other people, to see sunrises, sunsets, natural wonders, cities, villages, gardens, and artist studios; and to many other places, you enable the child to store "banks" of images in his or her mind—images which become valuable later in acting rationally in solving problems and reaching decisions.

If learning mathematics or any other subject becomes a "fun thing to do," then by all means encourage learning. But do not pressure the child.

If the child is reading, supply him or her with books. Ask him or her to read to you and tell you what he or she learned. Use events in or outside of reading as a basis for reasoning, judging value, or recording information or reactions.

Remember preschool learning often is unproductive unless followed by continual opportunities to learn, and unless the child has a supportive learning environment.

Question #3: Are state Gifted and Talented Education funds available to provide extra learning experiences for preschool gifted and talented children?

GATE funds are designated specifically for children in **kindergarten and grades one through twelve** who are enrolled in schools in those **public school** districts which have state-approved GATE programs.

Appropriate preschool learning environments might be found in cooperative or private preschool settings. Schools for preschool gifted and talented children should:

1. Make a thorough assessment of the child's abilities;
2. Prepare and provide you with a profile of his or her abilities and a plan for developing and facilitating the development of creative and intellectual skills, values, and enthusiasm for learning;
3. Involve children in arts experiences and music;
4. Teach through games of exploration discriminating objects, sounds, and textures and creative problem solving;
5. Develop the senses;
6. Be joyful.

Preschool environments should be attractive in the use of color, texture, furniture, decorator items, and space. These elements should encourage relaxation, exploration, learning, and other productive activity.

Question #4: How might I become informed about gifted and talented children and about their needs and appropriate learning experiences?

The best way to become informed is to play with and be with these and other children in learning experiences. At the preschool level, this could mean observing them at play—at home and in private preschool settings.

Your observations would be helped by guided reading and small-group discussions with experienced parents, teachers, and/or psychologists.

Informal or formal "child study" groups can do much to help parents see qualitative differences in needs and behavior.

Look for articles on behavior, needs, and programs for preschool gifted children. These appear from time to time

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in newspapers (Sunday editions), popular magazines, and professional journals. Check teacher and parent guidelines published by private schools.

Suggested reading includes:

1. Abrams, Kibby I. "Classroom Interactions of Gifted Preschoolers." *Teaching Exceptional Children,* May, 1982, pp. 223, 224, 225.
2. Clark, Barbara. *Growing Up Gifted.* Columbus: Merrill Publishers, 1983.
3. Felker, Roberta M. "A Parent's Guide to the Education of Preschool Gifted Children." A publication of the Council of State Directors of Programs for the Gifted and of the National Association of State Boards of Education. Washington, DC: 1982. Address: 444 N. Capitol St., N.W., Washington, DC 20001.
4. Hanninen, Gail. "Developing a Preschool Gifted/Talented Program." *G/C/T,* September/October, 1979, pp. 18, 19, 21.
5. Kaplan, Sandra (editor and contributor). "Educating the Preschool/Primary Gifted and Talented." Ventura, CA: LTI, 1980. Order through: Ventura County Superintendent of Schools, 535 E. Main St., Ventura, CA 93009. Phone: (805) 654-2770.
6. "Observation Guidelines for Day Care Centers (serving two and one-half to six year-olds). Reprinted* 1982 by the National Association of State Boards of Education, 444 N. Capitol St., N.W., Washington, DC 20001. *Source: Mattick, I. and Perkins, F.J. "Guidelines for Observation and Assessment: An Approach to Evaluating the Learning Environment of a Day Care Center." Washington, DC: The Day Care and Child Development Council of America, 1974.
7. Selected articles in *G/C/T.* P.O. Box 66654, Mobile, AL 36660.
8. Selected articles in the *Roeper Review,* 2190 N. Woodward Ave., Bloomfield Hills, MI 48013.
9. Selected articles in *Teaching Exceptional Children,* Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091-1589.

Smith - *(continued from page 2)*

The activities that are suggested for the screening program are based on the following concepts of how children learn:

- Children bring various networks of understanding to their interactions with the environment
- Children must be given the opportunity to acquire basic skills in order to build a foundation for extended and enriched experiences
- Children progress in learning as a direct result of explorations and interaction with their environment
- Children learn at different rates
- Children learn most effectively when their sensory/cognitive abilities are challenged
- Children's intellectual and creative skills can be enhanced through early and continuous stimulation of the use of these skills
- Children are individuals, each with a unique combination of interests, needs, and strengths
- Children are happiest when newly gained skills are used in meaningful participation in their world of learning

Special attention to affective changes, such as the child's interests, attitudes, and behaviors, will provide the teacher with important screening information.

Support for the implementation and maintenance of the program at schools is provided in the Gifted/Talented Programs Office in two in-service training meetings yearly. In addition, a publication, written by a development committee comprised of primary teachers and school psychologists, explains the philosophy, procedures for conducting the program, search and screening activities, units, and ancillary materials such as letters for parents, and observation forms.

This program gives an alternative to early labeling of children as gifted/talented while at the same time providing environments which are nurturing and stimulating. Furthermore, the awareness of giftedness achieved by teachers and parents becomes a catalyst for developing programs at advanced levels.

The farther backward you can look,
the farther forward you can see.

Winston Churchill

You may be disappointed if you fail,
but you are doomed if you don't try.

Beverly Sills

Life is either a daring adventure or nothing.

Helen Keller

Bookshelf

Review by Robert Hass
Administrative Assistant
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Developing Talent in Young People, Benjamin S. Bloom, ed. (New York: Ballantine Books, 1985). Cost $9.95

In his latest book entitled *Developing Talent in Young People*, researcher and educator Benjamin S. Bloom has identified three sequential phases of learning which he hypothesizes may be necessary if successful learning is to occur. The three phases—play and romance, precision and discipline, and generalization and integration—contain similarities to stages or levels proposed by earlier educators such as Alfred North Whitehead, John Dewey, and especially G. Stanley Hall.

Bloom argues that learning results from environmental intervention, and that the necessary stages for optimal learning are not determined by developmental changes in children's ways of thinking and behaving. The study challenges the notion that exceptional talent, even artistic or athletic, is substantially a "gift" of aptitude. His conclusions are based upon interviews conducted over the past four years by his research team at the University of Chicago with the parents and major teachers of 120 adults (averaging 35 years of age) who had attained world-class levels of achievement in their respective fields. All 120 adults were also interviewed. Bloom contends the study's major value is that it documents new insights into how human potential is achieved.

The study's subjects were selected from three broad talent fields—aesthetic/musical/artistic (painter and sculptors), athletic/psycho-motor (Olympic swimmers and world-class tennis players), and cognitive/intellectual (research mathematicians and neurologists). Investigators had planned to study a fourth area, interpersonal relations, but were unable to select criteria which would assure the selection of individuals with international levels of achievement.

The purpose of the study was to examine the process by which these individuals developed their talents to such an exceptional level. Bloom and his team of researchers concluded that no matter how able a child may be when very young, even child prodigies would not attain extreme levels of proficiency without a long, intensive, carefully planned process of training and encouragement. Such a program required that parents and teachers play equally important roles along the way.

The first stage of learning Bloom calls "The Early Years," a time for play and exploration. Instruction is informal and personal; learning assumes no particular pattern. In all cases the learner becomes "hooked" or captivated by exposure to the talent field.

The dominant theme of the "Middle Years," according to Bloom, is precision. Over a period of several years students gradually master the technical skills and vocabulary of the field. Instruction becomes more structured and less personal than before. Students develop a sense of competence and an identity as a pianist, artist, swimmer, etc.

In "The Later Years" or final phase of learning, students integrate aspects of the two previous stages. They move toward greater self-expression as their learning becomes more self-directed.

The role of parents in the life of each student was critical. Families catered to the youngster who displayed special interest in a talent field. Interestingly, this child was not necessarily the one considered most talented or possessing most natural ability, but rather a high achieving child most willing to work and motivated to excel. Particularly by the second stage, a majority of students also demonstrated an ability to learn rapidly.

Typically family schedules were rearranged to accommodate lessons, study, and special events. Parents commonly devoted large amounts of time monitoring practice, or attending meets and tournaments. They encouraged the child to drop other competing activities in favor of the one talent field. Frequently parents were satisfied with average or even mediocre school grades as a trade-off for the child's excelling in one talent area. According to Bloom, most parents raised their children to believe in the importance of hard work, doing something well, and thinking in terms of the future. Parents also tended to be models of the work ethic.

Teachers proved equally important in nurturing talent, according to the study. Generally a child's first teachers tended to be only of average ability but was chosen because of proximity to the home or was recommended by friends. Most often students changed teachers several times during the first two stages. By phase three students were usually working with a master teacher, often someone of international acclaim. As students progressed to more expert teachers, they were expected to commit longer and longer hours to their talent field each day. In most cases they did so willingly.

Bloom's study concluded that ". . . no matter how precocious one is at age ten or eleven, if the individual doesn't stay with the talent development process over many years, he or she will soon be outdistanced by others who do continue. A long-term commitment to the talent field and an increasing passion for the talent development are essential if the individual is to attain the highest levels of capability in the field."

Big Potential Comes in Small Packages

Identifying & Nurturing Gifted Toddlers

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In the past, educators and child development experts gave little attention to very young gifted children, and concerned parents had nowhere to turn for help. Nevertheless, research and experience indicate strongly that the first few years of children's lives have a marked effect on the way they learn, create, and view themselves in subsequent years. Consequently, child experts have begun to identify ways that parents can foster optimal development of gifted toddlers' abilities.

Parents are often accused of overestimating the abilities of their children. But contrary to popular opinion, research has found that parents actually do a better job than teachers at identifying gifted children.

Is Your Toddler Gifted?

You can use checklists of characteristics to help determine whether or not your child has unusual abilities. While such lists can serve as guidelines, you also need to realize such characteristics are drawn from the general population of gifted youngsters, and not all such traits are found in one child.

The following is a list of characteristics that apply to very young gifted children:

- **General Advanced Development**—Even in infancy, gifted children tend to attain milestones at a younger age than others. For example, they smile, crawl and walk sooner than other children.
- **Early Language Skills**—Gifted babies and toddlers demonstrate an advanced understanding of language. They respond to directions and listen to conversations at a noticeably younger age. Likewise, they often begin to talk earlier than other children. By 18 months, some gifted toddlers talk in full sentences.
- **Unusual Attention Span**—While other 1-year-olds flip quickly through picture books as an adult labels pictured items, gifted children often listen attentively to a story or study the pictures carefully.
- **Keen Observation Skills**—Gifted toddlers will often surprise parents by noticing details, such as tiny specks in a flower.
- **Unusual Curiosity**—Gifted youngsters stop to examine things for longer periods of time and more often. Once gifted children are able to talk, their curiosity becomes very apparent.
- **Exceptional Memory**—Gifted toddlers need to review information far less than other young children in order to master it. With little practice gifted children are able to remember the names of shapes, colors, etc.
- **Interest in Reading**—While some gifted children teach themselves to read as early as 2 years old, most simply show a keen interest in books and printed words.
- **Impatience with Their Own Limits**—Gifted toddlers can become very frustrated when they attempt tasks that are within their mental abilities but beyond their physical capacities. Typically a gifted child will cross out his or her own drawing of a tree and ask an adult to draw one as he or she describes it.
- **Understanding of Complex Concepts**—Gifted toddlers usually show advanced understanding of number concepts, such as the values of numerals, or the ability to add and subtract in their heads. They can perceive advanced cause and effect relationships—"If I put my glass of milk in the freezer it might crack."
- **Normal or Advanced Performance Despite Handicaps**—Toddlers who perform at or above age level in spite of physical handicaps, speech problems, visual or hearing impairments have overcome many learning barriers in order to perform at that level.

What You Can Do

Unfortunately, there are currently no ongoing programs reported nationwide for gifted children below the age of 3. Thus, it is almost entirely up to parents to ensure that their toddlers receive the kinds of stimulation that will help them develop their potential in fulfilling ways.

Tutoring a young child in reading and math with workbooks or flashcards will almost always be a dismal failure. Although a toddler may be extremely bright, he/she is not physically or emotionally mature enough to sit still at a table and drill facts or write words and numerals. Although 2 year olds may think like 5 year olds, they still have the emotional level of toddlers. Gifted toddlers need informal, involving activities that are appropriate for their young age level.

The surest instruments for encouraging gifted toddlers are books. You should *read, read, read* to your youngster and carry on activities related to books. The following activities work well with gifted toddlers:

- Before reaching the end of a familiar story, ask "What is going to happen?" Allow your child to either give an account of the story from memory or create a totally new ending.

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- Ask other questions about the story. These can include *recall* questions—"Who was in the race?," *opinion*—"Who wore the prettiest hat?," *evaluation*—"Which horse carried the most sticks?," *problem solving*—"How else could the pig get out of the pen?," and questions that encourage *creativity* or fanciful ideas—"What kind of song could the little car sing?"
- Ask your child to act out a familiar story or retell it using stuffed animals, puppets, or other props.
- If you encounter an advanced word while reading a book together, talk about its meaning with your child.

Strike a Balance

The freedom to explore and learn is very crucial for gifted toddlers. They do not do well in restricted environments and when frustrated develop behavior problems. Within limits of safety, encourage your gifted toddler to try things out, stop and look, try again. This applies to self-help tasks as well as learning skills. Step back and let your gifted youngster do as much as possible independently—dressing, cleaning up toys, bathing, grooming.

While the opportunity for independence is vital, permissiveness will only confuse young children. Even gifted children need to have well-defined limits on their behavior. These include rules about respecting other people and property, as well as limits concerning safety.

Motivation is as crucial as innate ability. Like everyone, very young children thrive on positive reactions and comments from others. When your toddler does something new, you should talk about the achievement and praise him or her for it. Likewise, failures should be treated as natural events, with the message that the child can now try again, or put the task aside for a while and go on to a different challenge.

Because many achievements come easily to gifted children, you should concentrate on praising efforts rather than advanced performance. If your toddler can easily work a puzzle intended for 3 year olds, you should save your praise for when he or she masters the more difficult puzzle geared for 4 and 5 year olds.

Bright children who are doted on see themselves as the center of things. You need to show your child that adults have their own worthwhile interests. You should not feel guilty about making a toddler wait for a while for attention as you attend to your own business. When you convey the message that all family members have the right to explore, create, work and play, gifted toddlers get the message that growing in all ways is an exciting lifelong process.

Educational Discrepancies

By Sandra N. Kaplan, Associate Director National/State Leadership Training Institute on the Gifted and the Talented (N/S-LTI-G/T)

The success and failure of preschool/primary programs for gifted students can be related to several educational discrepancies. These discrepancies represent the variances between the understandings of the abilities, needs, and interests of these students and the translation of these understandings into practice.

While discrepancies between educational statements and practices are not unique to programs for young gifted students, the perceptions of educators and parents concerning the validity of preschool/primary programs for this population has been shaded by the consequences of some educational discrepancies. The deferment of programs and appropriate curricula, disillusionment about the nature and needs of the gifted, and disregard for the affective as well as cognitive factors of giftedness are some of the consequences resulting from the educational discrepancies which plague the education of preschool/primary gifted students.

It is recognized that young children need readiness experiences as prerequisites for other types of learnings. Often this same concept is ignored as it applies to the young **gifted** learner. This educational discrepancy develops from a lack of knowledge about the relationship between being a gifted child as well as young learner. It also is predicated upon the assumption that to be gifted means to be ready to learn. Subsequently, the young gifted student is confronted with curricular modifications in the content or subject matter to be assimilated, processes or skills to be mastered, and products to be developed which are aligned to the abilities of the gifted without commensurate readiness to perform adequately such curricular tasks. Discussions of underachievement, lack of necessity to attend to gifted students within the preschool/primary age or grade levels results.

The need for a "transition" or readiness curriculum for preschool/primary gifted students would resolve these educational discrepancies and their concomitant consequences. A "transition" or readiness curriculum bridges the gap between the real or actual status and the perceived level of functioning of the young gifted learner. The identification of the child as a gifted learner should not predispose the educator to anticipate that the label of giftedness is equivalent to the learner's abilities to perform in a differentiated curriculum. Actually, most gifted students have been recognized for their giftedness in the basic or regular curriculum and then are expected to

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perform in a differentiated curriculum as a result of their identification. The mere identification of a child as gifted is insufficient preparation, in many cases, for young students to be participants in a differentiated curriculum. Identification and readiness are not synonymous terms. Some type of formal readiness curriculum should be considered as an integral aspect of the preschool/primary program for young gifted students.

A "transition" curriculum can be defined as one that prepares students for their participation in a differentiated curriculum. It provides academic, social, and emotional experiences that ease the young gifted student's entry into a differentiated curriculum. Activities which ready the young gifted learner to respond divergently, to value generalizations as well as facts, to appreciate productivity, and to perceive themselves as scholars are fundamental to that curriculum which aids gifted children in becoming successful gifted learners and members of preschool/primary gifted programs.

Another educational discrepancy that affects students of and the benefits derived from preschool/primary gifted programs relates to the type and scope of the learning environment in which these students learn. The need of a young child to be in a learning setting that is stimulating and demanding of activity often is neglected by educators of the gifted who equate the need for academic rigor with a sterile and rigid environment. An adequate learning environment for the young gifted learner is one that is supportive of the behaviors which define giftedness. Such an environment reinforces the display of the characteristics of giftedness. For example, if young gifted students are recognized as those who are curious, the environment must provide opportunities which encourage the manifestations of this trait. On the next page are some activities which have been designed for the classroom in order to stimulate the expression of the characteristics that identify the gifted child as gifted.

Summary

Congruency between the knowledge educators possess concerning the nature of the young child and the needs and abilities of the gifted learner are fundamental to appropriate preschool/primary programs.

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Joyce VanTassel-Baska

(Continued from page 14)

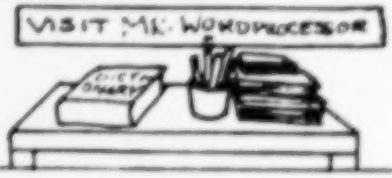
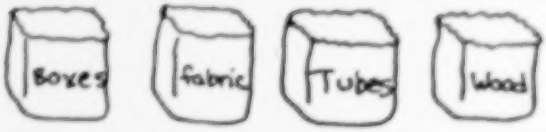
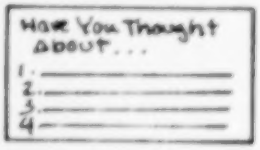
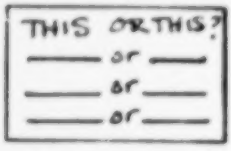
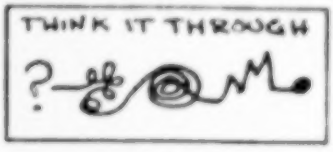
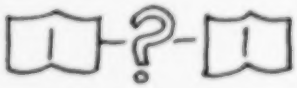
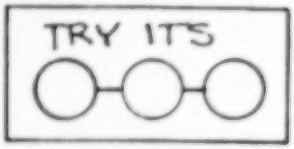
elaboration	7. How else would you describe stars besides as "diamonds in the sky?"
divergent	8. Pretend you are traveling from star to star. What do you notice that we can't from the earth?
inductive reasoning	9. Stars sometimes form patterns called constellations. Here are a few of them. What does each look like? Have you ever seen these patterns? Now you can look for them.
evaluation/ analysis	10. What is your favorite pattern of stars. Why?
synthesis	11. Create your own favorite star pattern. Use color, shape, and location to convey your pattern.
flexibility	12. Stars are used in many ways in our world. How many different ways can you name?

Good book lists should be available to the gifted at all ages and teachers should actively encourage students to read particular selections. Examples of exemplary books for young gifted children at the preschool-primary level include:

Barbara Cooney's	*Miss Rumphius*
Arnold Lobel's	*The Rose in My Garden*
Verna Aardema's	*Bringing the Rain to Kapiti Plain* (others by this author are also appropriate)
Eric Carle's	*The Very Hungry Caterpillar*
Mercer Mayer's	*There's a Nightmare in My Closet*
Margaret Wise's	*The Runaway Bunny*
Maurice Sendak's	*Where the Wild Things Are*
	Caps for Sale
	Tikitiki Tembo
Robert McClosky's	*Make Way for Ducklings*
	Anno's Journey
William Steig's	*Doctor DeSoto*
	Sylvester and the Magic Pebble
Franklyn Branley's	*Flash, Crash, Rumble, and Roll* (other science books also available)
	Babar series
	Curious George series
	Berenstein Bears series
	Amelia Badelia series

In conclusion, it is important for parents and teachers alike to provide the young gifted child with the world of literature as a tool to experience the world. It is also important that they recognize this world can be unlocked for children without mastering the basic skills of reading and can enhance such mastery when it occurs. Furthermore, the literature experience can provide a context for early writing encounters that facilitate ideational fluency and visualization. It is hoped that literature and **not** reading skills be considered fundamental to academic progress for young gifted chilren.

The Young Gifted Child

CHARACTERISTICS	CLASSROOM ENVIRONMENT MUSTS
Good Vocabulary	
Original Ideas	
Learns Quickly	
Reasons Well	 
Curious	 
Displays Leadership	
Makes relationships, Generalizations	

Intellectual Development During Early Childhood (Two Through Four Years)

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(Selected portions taken from Growing Up Gifted, *2nd Edition, published by Charles E. Merrill, 1983.)*

Linguists have theorized that between eighteen months and four years of age every human has available an innate ordering device for learning language referred to as the Language Acquisition Device (LAD) (Chomsky, 1966; McNeill, 1966). During this LAD period, the environment of the child must be rich in language experience. Never again will the child have the ability to learn language-related activities with such ease. Learning is cumulative. If we are to optimize the learning opportunities of our children, we must take advantage of those periods when learning proceeds most rapidly and efficiently. Young children will acquire language effortlessly if language is around them, but the kind of language they acquire, whether an instrument of clarity, precision, and imagination or only a tool to handle biological and social exchanges, will depend on the linguistic environment supplied by adults.

Reading as a visual language experience is analogous to speech as an auditory language experience. Both represent receptive language, and both may present similar cognitive problems to the learner. Possibly the eighteen-month-to-four-year-old language acquisition period presents the child with an advantage in organizing visual language input (reading) as it does for other language experiences.

Children I have known and those reported in the literature (Durkin, 1966; Fowler, 1962) learn with ease and pleasure during the LAD period. At six years of age learning to read becomes quite a different matter. We must later deliberately teach what is incidentally learned during the earlier period. Few children are allowed the opportunity to interact with symbolic language during this early period. Professional education has done an excellent job of convincing parents that they cannot teach reading. And yet, if allowed the opportunity to play with words, if read to or shown any of the ways letters can be used to represent sound, children find their own way to learn. In an environment that responds as the children direct, that is rich in good language experiences, they enjoy learning in their own way. Learning to read would be no exception.

Some years ago educators informed parents that early learning was a waste of time. People accepted the notion that children who learned later would catch up anyway. Too many people, without looking at new data, still believe this to be true. The work of Durkin (1966) has given us a different view of children who read early. Her research shows that children who enter school already reading have a learning advantage that continues to accelerate during the school years. By sixth grade, far from "catching up," the late readers (those learning in first grade) were increasingly outdistanced by the performance of the early readers. Fowler (1963) found much the same to be true and linked the results of early reading to the higher intellectual development of his children. He found

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reading not only easily accomplished by younger children, but felt that it enriched their play life and resulted in happier, more well-rounded children.

We have long known that gifted children read early. Could it be true that children are gifted because they read early? Could this activity and other types of stimulation set into motion structural changes in the organism that result in high-level intellectual development? The data now available support this possibility.

To understand how a person's capacity for learning is affected by the early environment, especially during critical or sensitive periods, we must return to the principles of interaction. Experience affects gene production by making demands on the cell's metabolic resources in such a way that the organism is able to meet similar learning demands in the future more easily. If these demands are made early and repeated, they make lasting changes in the neural structure of the organism. Increased activity increases the amount of transmitter fluid produced at a synapse, the point where there is firing from one brain cell to another during thinking. Nerve cells and fibers become larger through use as does the capillary network. The thickness and weight of the entire cortex increase by environmental enrichment. There is evidence that experience does lead to maturation. We have had evidence available for over thirty-five years that myelinization of the optic tracts is accelerated by stimulation. The assumption that genetic material is completely preprogrammed, and therefore contributes to a stable inheritable mental capacity, cannot be supported in light of more recent evidence.

CREATING THE RESPONSIVE ENVIRONMENT (Two Through Four Years)

We now have a child who is interested in the world and other children. This child has outgrown the baby stage. During the two- through four-year period, the child's mental powers show rapid growth. Speech, mobility, increasing social involvement all add to the fast-paced intellectual development. All of the play materials from previous periods are useful, but in different ways. This child creates, draws, pretends, and imagines, but only if allowed to and if provisions for these activities have been made. Space to explore his or her own way and time to "do it myself" are needed. The child is now a thinker.

The Preschool Curriculum

During this time of rapid growth for the young child it is important that all modes of learning be nurtured. Many of the characteristics of giftedness may already be evident and should be supported. Rather than just identifying giftedness, the activities of the years prior to and including this period can be said to produce giftedness.

Curriculum for all preschool children must be rich in variety and stimulating in process. For those who are developing faster and who show higher levels of intelligence, such variety and stimulation is even more necessary. In their experiences we can include more activities allowing self-direction, exposure to more abstract concepts, and more involvement with the tools and skills for operating in the areas of reading, mathematics, science, research, art, music, writing, and the world in which they live. Decentralization is appropriate with centers or areas for academic and artistic activities. Choice making can be developed and used by children as young as two and gives the child a sense of competency and achievement, as it does to children further along in their learning. Even very young children can learn to manage their own choice of centers or areas in which to participate, their use of time, and other experiences leading them toward becoming independent learners such as voluntary adherence to limits on numbers of children who can participate in a given center at a certain time, signals as to when and where activities are most appropriate, etc. It takes more complex planning and structuring to allow the necessary freedom and independence that develops high levels of interaction for young children and ultimately produces higher levels of intelligence. However, the results are so valuable and so important to the future of the child that any parent or teacher would be well advised to expend this extra effort.

Language patterns and vocabulary can be very important teaching tools. The choice of words can make a child feel suppressed and helpless or supported and competent. For instance, in situations where the child is involved in an activity that is not allowed, the parent or teacher could use language allowing an alternative choice, e.g., "You can't do this, but you can do this," directing the child to a more appropriate activity. This language produces choice and allows the child to begin to develop alternative thinking skills. Set up situations where the child can be invited to explore and test hypotheses. When a child encounters an obstacle, ask "How can we do that?" If the child encounters something too risky or too scary, suggest "I'll go with you and then you can go all the way through that tunnel. Next time you can do it yourself if you want to." Be sure to use lots of verbal reminders of the child's worth just for being who he or she is, not just when something was done well. As you pass by, say briefly "I really like you." Do be sure that you also share your negative human feelings clearly. Children notice when things are unpleasant. It would be better to state your feeling, such as "What you are doing makes me angry,"

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rather than leaving to chance the interpretation of what is happening. You then have given them the opportunity to change and they need not misinterpret your feelings into a negative concept of themselves. Always with gifted children use lots of humor; they delight in it.

The curriculum for gifted young children must play to the ages and stages of growth by always stretching just a bit beyond the normative expectations. Viewing each stage of development as an exciting opportunity for growth will allow a far more appropriate learning situation, e.g., the "terrible twos" are seen as a time for testing limits, for risk taking; the threes begin real involvement with opportunities to build social skills; the fours see the child move from me to others; and the fives give endless possibilities for developing independence. A responsive environment allows the organic needs of the child to be met.

When selecting a preschool for their gifted children, parents can improve the possibility of choosing an appropriate program by carefully observing the following:

1. *The teacher* interacting with the children: Do the teachers genuinely like children? Are they being authentic, showing their real feelings, letting the children know them as people? The research on programs for young children indicates that no one program can be shown to be the best. All models investigated were effective when teachers were committed to the model and dedicated to the children.
2. *The environment:* Is it nourishing for children? Is it pretty, colorful, thoughtfully organized? Is it flexible, pleasant, and inviting? Does the environment change to stay interesting? The involved, caring parent or teacher who is providing ways that children can learn things that both they and the children find interesting produces the most effective environment for learning.
3. *The activities:* Are there lots of different activities at different levels of difficulty? Are there activities to challenge and stretch the child's thinking? feelings? intuition? physical sensing? Can the children go as far as they want with an activity? Are there lots of skills for the child to master creatively?

Academic subjects can be introduced in an integrative way, that is by combining cognition with feeling, physical sensing, and intuition.

Data show that most human beings are born with enormous potential. However, three characteristics seem to be necessary to achieve at high levels: unusual willingness to do great amounts of work, a determination to do one's best at all cost, and the ability to learn rapidly. These traits appear to emerge from the early socialization and attitudes in the home and the early training provided by teachers. The evidence that learning rates can be altered by appropriate educational and environmental conditions suggests that very favorable learning conditions provided in the early years can markedly influence learning rate. As the rate of learning is an expression of advanced and accelerated brain development, this evidence relates to our discussion of developing intelligence.

Of major interest is the power of the parents' belief in the child. If the parents believe that a particular child has special ability they will hold different expectancies, allow more opportunities to develop the ability, and treat this child differently. Even if, in fact, the child was not significantly more able than others in the family these beliefs and expectations and what they caused parents, teachers, and the child to do seem most important to the early and resulting later development of the given ability in reaching an outstanding level.

The following factors seem to be most important in the identification and development of special ability:

- Parents who greatly value and enjoy either music, arts, sports, or intellectual activity and view it as a natural part of life so that the child learns to speak its language
- Parents who believe in the work ethic
- A first teacher who is warm and loving, who makes lessons seem like games, instructs on a one-to-one basis, and includes parental interest
- A second teacher who emphasizes skills and self-discipline and continues to individualize instruction
- Access to a master teacher who opens doors

It should be noted that parents are natural teachers. No one else can equal their knowledge of the child, their concerns and responsiveness. With a few learning tools at their disposal, parents can play a major part in their child's early education. Attitude lends the most important ingredient to any learning situation. The child must approach learning with a spirit of adventure and playfulness. Learning should be a joy, not a punishment; a favor, not a duty. Parents can ensure this attitude if they allow the child's natural curiosity to guide the task. The amount of time parents spend playing with their preschoolers is directly related to an increase in verbal intelligence test scores. Parents should view teaching as a pleasure to be shared with their child. Parents need not worry if their child seems reluctant to learn at any given moment. Given opportunities by parents flexible to a variety of responses, chances are that the child will learn faster than expected. If not, the child must be allowed to set the learning pace. Most importantly, remember to foster the excitement of learning. Parents can be assured that—

. . . young children are capable of a great deal of learning,
. . . their children will enjoy learning,
. . . they can be their child's most responsive teacher,
. . . they will enjoy sharing this experience with their child.

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Caregiver Activities

Caregiver Activities	Because
Organize an environment that allows choice and a high degree of variety and novelty. Organize so that the child can follow through on an activity to its conclusion, *e.g.*, when writing a story, illustrate it and bind into a book, when planting seeds, water and care for plant as it grows.	It helps develop an independent autonomous learner, inner locus of control, intellectual stimulation, developing sense of responsibility.
Centers or areas where children can discover basic concepts, *e.g.*, in math, science, etc.; specific school skills, *e.g.*, writing, hole punching, use of ruler, and develop awareness of themselves.	This provide intellectual stimulation, cognitive skill, problem solving abilities.
Provide inspiration and materials for children to write their own books and poems, with the help of an encouraging adult who will write as the story, poem is dictated.	This is useful in developing creativity, basic reading skills, language experience, and intuitive skills.
Provide a variety of art materials, *e.g.*, glue, colored paper, scissors, beans, bits of yarn, ribbon, scraps of wood, crayons, large sized paper, marking pens, water paints, clay, etc., materials that will enrich them beyond when they have gone, *e.g.*, "I did something inside the clay and let it come out with your hands."	This facilitates developing creativity, sensory skills, artistic and intuitive abilities.
Provide sharing times and social outings with other children, organize group games and cooperative activities. Allow opportunities to settle differences with other children, guiding only when necessary.	Research shows that young children can increase their cooperative social interactions, ability to overcome obstacles and to talk with peers, and decrease negative behavior (Rosehill, Jackson, and Robinson, 1980). This allows children to grow in social problem solving.
Make use of the community and the surrounding areas for field trips and explorations.	This develops a sense of competence, autonomy, deeper understanding and appreciation of nature.
Provide opportunities to establish a relationship with a significant adult friend.	This allows children to get another point of view on issues, acquaints them with other interests, language patterns, and vocabulary, allows them to be guided and listened to when they feel parents cannot.

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